UNITED STATES DEPARTMENT OF AGRICULTURE
NATURAL RESOURCES CONSERVATION SERVICE

ECOLOGICAL SITE DESCRIPTION

ECOLOGICAL SITE CHARACTERISTICS

Site Type: Forest
Site ID: F042XA003NM
Site Name: *Pseudotsuga menziesii – Populus tremuloides*
Major Land Resource Area and Common Resource Area MLRA 42 / CRA NM-3
Precipitation or Climate Zone: Sandia / Manzano Mountains 16”-30”ppt. annually
Phase:

ORIGINAL SITE DESCRIPTION APPROVAL:

Site Date: July 30 2002
Site Author: Steve Lacy
Site Approval:
Approval Date:

REVISIONS:

Revision Date:
Revisor:
Revision Approval:
Approval Date:
Revision Notes:

PHYSIOGRAPHIC FEATURES

Narrative:

The mixed conifer community is found above 8,000 feet and prefers a cool, north facing aspect. This forest type is found in subregioin area NM-3, on the Cibola National Forest. The Sandia and Manzano mountains are fault block mountains with steep faces facing west and gentle slopes towards the east.

LAND FORM:

1. mountain slopes
2.
3.

ASPECT:

1. north facing
2.
3.

	Minimum	Maximum
Elevation (feet)	8,000 ft.	above 8,000 ft.
Slope (percent)		
Water Table Depth (inches)		

Flooding:	Minimum	Maximum
Frequency		
Duration		

Ponding:	Minimum	Maximum
Depth (inches)		
Frequency		
Duration		

Runoff Class:

CLIMATIC FEATURES

Narrative:

This area of mountain slopes and valleys receives the majority of its annual moisture during the summer monsoon season. Additional moisture is received during winter snow events.

	Minimum	Maximum
Frost-free period (days):	80	130
Freeze-free period (days):		
Mean annual precipitation (inches):	16”	30”

Monthly moisture (inches) and temperature (^{0}F) distribution:

	Avg. Precip. In.	Avg. Snowfall Total	Temp. Min.	Temp. Max.
January	1.96	19.3	1301	26.8
February	1.91	23.0	14.1	28.3
March	2.34	23.3	17.3	32.6
April	1.26	10.7	24.7	42.2
May	0.91	3.8	33.9	53.2
June	0.95	0.1	43.1	63.9
July	3.19	-	47.4	66.3
August	3.28	-	45.6	62.9
September	1.82	0.1	40.7	57.1
October	1.83	5.3	32.5	47.8
November	1.39	10.0	22.2	36.6
December	2.01	20.7	15.5	29.5

Climate Stations:

			Lat	**Long**		**Period**		
Station ID	Sandia Crest	Location	3513	10627	From:	1953	To:	1979
Station ID		Location			From:		To:	
Station ID		Location			From:		To:	
Station ID		Location			From:		To:	
Station ID		Location			From:		To:	

INFLUENCING WATER FEATURES

Narrative:

Wetland description:

System	Subsystem	Class

If Riverine Wetland System enter Rosgen Stream Type:

REPRESENTATIVE SOIL FEATURES

Narrative:

Parent Material Kind: _____

Parent Material Origin: _____

Surface Texture:

1.
2.
3.

Surface Texture Modifier:

1.
2.
3.

Subsurface Texture Group: _____

Surface Fragments <=3" (% Cover): _____

Surface Fragments >3" (% Cover): _____

Subsurface Fragments <=3" (%Volume): _____

Subsurface Fragments >=3" (%Volume): _____

	Minimum	Maximum
Drainage Class:		
Permeability Class:		
Depth (inches):		
Electrical Conductivity (mmhos/cm):		
Sodium Absorption Ratio:		
Soil Reaction (1:1 Water):		
Soil Reaction (0.1M CaCl2):		
Available Water Capacity (inches):		
Calcium Carbonate Equivalent (percent):		

Soil survey associations:
This ecological site is associated with the map units and soil components in the following soil surveys. Future updates to this soil survey may affect these associations. For up-to-date associations between soil components and this ecological site, refer to NASIS. Associations between ecological sites and soil components are maintained in NASIS via the ecological site ID.

MAP UNIT NAME

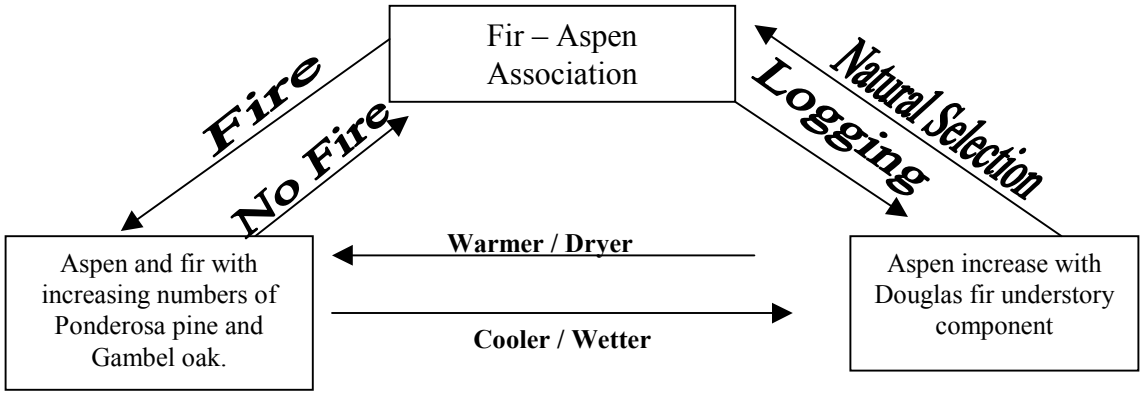
Soil survey	Map unit symbol	Soil components

PLANT COMMUNITIES

Ecological Dynamics of the Site:

The mixed conifer community occupies the higher mountain slopes of the Sandia and Manzano mountains above 8,000 feet. Increased amounts of available moisture on north facing aspect leads to denser stands of Douglas fir and aspen. More ponderosa pine is found on sunnier and drier aspects.

Plant Communities and Transitional Pathways (diagram)



Interpretive Plant Community: Naturalized Plant Community

Ground Cover and Structure:

Cover Type	Percent Ground Cover by Height Class (feet)								
	<.5	.5-1	>1-2	>2-4.5	>4.5-13	>13-40	>40-80	>80-120	>120
Grass/Grass Like									
Forb									
Shrub/Vine									
Tree									
Lichen									
Moss									
Litter									
Course Fragment									
Bare Ground									

Forest Overstory Composition:

The typical forest overstory composition of the historic climax community.

Common Name	**Scientific Name**	**Percent Composition (percent by frequency)**
Douglas fir	*Pseudotsuga menziesii*	
Quaking aspen	*Populus tremuloides*	
Engelmann spruce	*Picca engelmanii*	
Ponderosa pine	*Pinus ponderosa*	

Forest Understory Composition:

The typical annual production of understory species to a height of 4.5 feet (excluding boles of trees) under low, high, and representative canopy covers.

		Annual Production Per Acre Percent and Pounds (air-dry weight)					
		Canopy Cover Percent					
		80		**90**		**100**	
Common Name	**Scientific Name**	%	lbs	%	lbs	%	lbs
New Mexico locust	*Robinia neomexicana*						
Gambel oak	*Quercus gambelii*						

Typical Climax Community:

Dense stands of Douglas fir and Quaking aspen on north facing slopes. Thinner stands with some Ponderosa pine on other aspects.

Plant Community: (as it exists today)

Douglas fir and quaking aspen becoming more prevalent with increasing elevation. Ponderosa pine may be abundant on lower, warmer elevations and aspects.

Ground Cover and Structure:

	Percent Ground Cover by Height Class (feet)								
Cover Type	<.5	.5-1	>1-2	>2-4.5	>4.5-13	>13-40	>40-80	>80-120	>120
Grass/Grass Like									
Forb									
Shrub/Vine									
Tree									
Lichen									
Moss									
Litter									
Course Fragment									
Bare Ground									

Forest Overstory Composition:

The typical forest overstory composition of the historic climax community.

Common Name	Scientific Name	Percent Composition (percent by frequency)
Douglas fir	*Pseudotsuga menziesii*	
Quaking aspen	*Populus tremuloides*	
Ponderosa pine	*Pinus ponderosa*	

Forest Understory Composition:

The typical annual production of understory species to a height of 4.5 feet (excluding boles of trees) under low, high, and representative canopy covers.

		Annual Production Per Acre Percent and Pounds (air-dry weight)					
		Canopy Cover Percent					
		75		85		95	
Common Name	Scientific Name	%	lbs	%	lbs	%	lbs
Gambel oak	*Quercus gambelii*						
New Mexico locust	*Robinia neomexicana*						
Total Annual Production							

Plant Community: (as it exists today)

ECOLOGICAL SITE INTERPRETATIONS

Forest Site Productivity

		Annual Productivity (per acre per year)						
		Site Index		Cubic Feet (CMAI)		Other Units		
Common Name	**Scientific Name**	Low	High	Low	High	Low	High	Unit
Douglas fir	*Pseudotsuga menziesii*							
Ponderosa pine	*Pinus ponderosa*							

Soil Survey Associations:

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		Map Unit Name
Soil Survey	Map Unit Symbol	Soil Components

ECOLOGICAL SITE INTERPRETATIONS

Animal Community:

Mature forest species include elk, mule deer, black bear, mountain lion, grouse and squirrels.

Plant Preference by Animal Kind:

Animal Kind: _____

Animal Type: _____

Common Name	Scientific Name	Plant Part	Forage Preferences											
			J	F	M	A	M	J	J	A	S	O	N	D

Animal Kind: _____

Animal Type: _____

Common Name	Scientific Name	Plant Part	Forage Preferences											
			J	F	M	A	M	J	J	A	S	O	N	D

Hydrology Functions:

Heavy canopy cover and thick duff layers act to reduce the surface impact of rainfall and helps to increase storage and infiltration of moisture. North facing aspects retain snowpack for longer periods in the spring.

Recreational Uses:

1. Camping
2. Skiing
3. Hiking
4. Hunting

Wood Products:

Ponderosa pine and Douglas fir could produce saw logs.

Other Products:

Other Information:

Supporting Information

Associated Sites:

Site Name	Site ID	Site Narrative

Similar Sites:

Site Name	Site ID	Site Narrative

Inventory Data References (narrative):

Inventory Data References:

Data Source	Number of Records	Sample Period	State	County

State Correlation:
This site has been correlated with the following sites: _____

Type Locality:
State: New Mexico
County: Bernalillo
Latitude: _____
Longitude: _____
Township: _____
Range: _____
Section: _____

Is the type locality sensitive? Yes ☐ No ☐

General Legal Description: _____

Relationship to Other Established Classifications:

Other References: